

Abstract

A fuel pump has a pump housing that includes a cover having a face surface and a body having a face surface. An arcuate channel is defined in the face surfaces of the cover and the body. The arcuate channels extend at least partially circumferentially on the surfaces. An inlet opening extends through the cover and is coupled to the cover channel. An outlet opening extends through the body and is coupled to the body channel. An impeller is positioned between the face surface of the cover and the face surface of the body. At least one of the cover channel or the body channel has a cross-sectional shape along at least part of its length that includes a lower section and an upper section. The lower section has a semi-elliptical, partial semi-elliptical, or partial semi-circular shape, and the upper section has a pair of straight walls that are coupled to the lower section.